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Exon 2

Exon 1

Tripple alpha helical coiled coil
forming

Trimer stabilising

E₁P₂P T Q K P K K I V N A K K D₁₆ V₁₇ N T K M F E E L K S R L D T L A Q E V A L L K E Q Q A L Q T V C L₅₁

Fig. 1

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Position	d	e	f	g	a	b	c	d	e	f	g	a	b	c	d	e	f	g	a																	
Human tetranectin	V	V	N	T	K	M	F	E	E	L	K	S	R	L	D	T	L	A	Q	E	V	A	L	L	K	E	Q	Q	A	L	Q	T	V	C	L	K
Murine tetranectin	L	V	S	S	K	M	F	E	E	L	K	N	R	M	D	V	L	A	Q	E	V	A	L	L	K	E	K	Q	A	L	Q	T	V	C	L	K
Bovine cart. protein	R	R	V	K	E	K	D	G	D	L	K	T	Q	V	E	K	L	W	R	E	V	N	A	L	K	E	M	Q	A	L	Q	T	V	C	L	R
Shark cart. protein	S	K	S	G	K	G	K	D	D	L	R	N	E	I	D	K	L	W	R	E	V	N	S	L	K	E	M	Q	A	L	Q	T	V	C	L	K
Consensus	L											h	y	L		E	V							L	K	E		Q	A	L	Q	T	V	C	L	

Fig. 2

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tripa

G S I Q G R S P G T E P P T T V S L K G S *

GATCAATCCAGGAAGATCTCTGTGACCGAGCCACCAACC ----- ACGGTCTCCCTGAAGGGATCCTAA

Bgl II Kpn II Bam HI

tripb

G S I Q G R / S P G T E P P T A L Q T G S *

GATCAATCCAGGAAGATCTCTGTGACCGAGCCACCAACC ----- GCCCTGCAGACGGGATCCTAA

Bgl II Kpn II Bam HI

M G S H H H H H

CATATGGGATCGCATCACCATCACCATCAG - - - - AGCTTGAATTC

Bam HI/Bcl I Hind III Eco RI

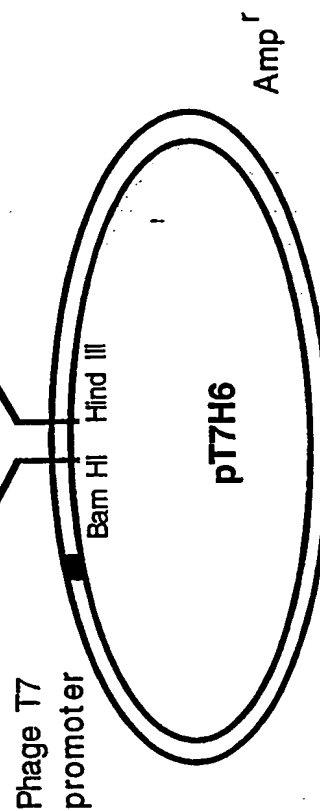


Fig. 3

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H6FXtripa fusion protein

```
1  M G S H H H H H G S I Q G R S P G T E P P T Q K P K K I V 30
31 N A K K D V V N T K M F E E L K S R L D T L A Q E V A L L K 60
61 E Q Q A L Q T V S L K G S * 73
```

H6FXtripB fusion protein

```
1  M G S H H H H H H G S I Q G R S P G T E P P T Q K P K K I V 30
31 N A K K D V V N T K M F E E L K S R L D T L A Q E V A L L K 60
61 E Q Q A L Q T G S * 69
```

Fig. 4

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TN123

G S I E G R G E P I V *
GATCCATCGAGGGTAGGGGCGAGCCA --- ATCGTGTAM V R A- **CII** -E G G S H H H H H H
CATATGGTTCGTGCA \-----GAAGGGGGATCGCATCACCATCACCATCAGG --- AGCTTGAATTC
Bam HI Hind III Eco RIPhage T7
promoter

Bam HI Hind III

pT7CIIH6

Amp^r

TN123

G S I E G R G E P I V *
GATCCATCGAGGGTAGGGGCGAGCCA --- ATCGTGTAM G S H H H H H H
CATATGGGATCGCATCACCATCACCATCAGG --- AGCTTGAATTC
Bam HI Hind III Eco RIPhage T7
promoter

Bam HI Hind III

pT7H6

Amp^r

Fig. 5

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CIH6FXTN123 fusion protein

1 MVRANKRNEALRIESALLNKIAMLGTEKTA 30
31 EGGSHHHHHHGSIEGRGEPPTQKPKKIVNA 60
61 KKDVVNTKMFEEELKSRLDTLAQEVALLKEQ 90
91 QALQTVCLKGTKVHMKCFLAFTQTKTFHEA 120
121 SEDCISRGGTLSTPQTGSENDALYEYLRQS 150
151 VGNEAEIWLGLNDMAAEGTWVDMTGARIAY 180
181 KNWETEITAQPDGGKTENCAVLSGAANGKW 210
211 FDKRCRDQLPYICQFGIV * 228

H6FXTN123 fusion protein

1 MGSHHHHHHHGSIEGRGEPPTQKPKKIVNAK 30
31 KDVVNTKMFEEELKSRLDTLAQEVALLKEQQ 60
61 ALQTVCLKGTKVHMKCFLAFTQTKTFHEAS 90
91 EDCISRGGTLSTPQTGSENDALYEYLRQSV 120
121 GNEAEIWLGLNDMAAEGTWVDMTGARIAYK 150
151 NWETEITAQPDGGKTENCAVLSGAANGKWF 180
181 DKRCRDQLPYICQFGIV * 197

Fig. 6

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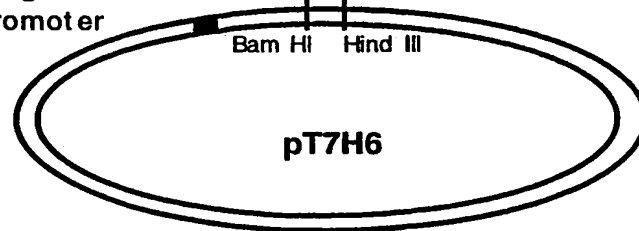
TN12 G S I E G R G E P P Q T V *
GATCCATCGAGGGTAGGGGCGAGCCACCA-----CAGACGGTCTA

TN23 G S I Q G R V V N T G I V *
GATCCATCCAGGGTAGGGTTGTGAACACA-----GGGATCGTGTA

TN3 G S I E G R A L Q G I V *
GATCCATCGAGGGTAGGGCCCTGCAG-----GGGATCGTGTA

M G S H H H H H H
CATATGGGATCGCATCACCATCACCATCAG - - - - AGCTTGAATTC
Bam HI Hind III Eco RI

Phage T7
promoter



Amp^r

Fig. 7

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H6FXTN12 fusion protein

```
1  M G S H H H H H H G S I E G R G E P P T Q K P K K I V N A K   30
31  K D V V N T K M F E E L K S R L D T L A Q E V A L L K E Q Q   60
61  A L Q T V *                                                    65
```

H6FXTN23 fusion protein

```
1  M G S H H H H H H G S I Q G R V V N T K M F E E L K S R L D   30
31  T L A Q E V A L L K E Q Q A L Q T V C L K G T K V H M K C F   60
61  L A F T Q T K T F H E A S E D C I S R G G T L S T P Q T G S   90
91  E N D A L Y E Y L R Q S V G N E A E I W L G L N D M A A E G  120
121 T W V D M T G A R I A Y K N W E T E I T A Q P D G G K T E N  150
151 C A V L S G A A N G K W F D K R C R D Q L P Y I C Q F G I V  180
181 *
```

H6FXTN3 fusion protein

```
1  M G S H H H H H H G S I E G R A L Q T V C L K G T K V H M K   30
31  C F L A F T Q T K T F H E A S E D C I S R G G T L S T P Q T   60
61  G S E N D A L Y E Y L R Q S V G N E A E I W L G L N D M A A   90
91  E G T W V D M T G A R I A Y K N W E T E I T A Q P D G G K T  120
121 E N C A V L S G A A N G K W F D K R C R D Q L P Y I C Q F G  150
151 I V *                                                            152
```

Fig. 8

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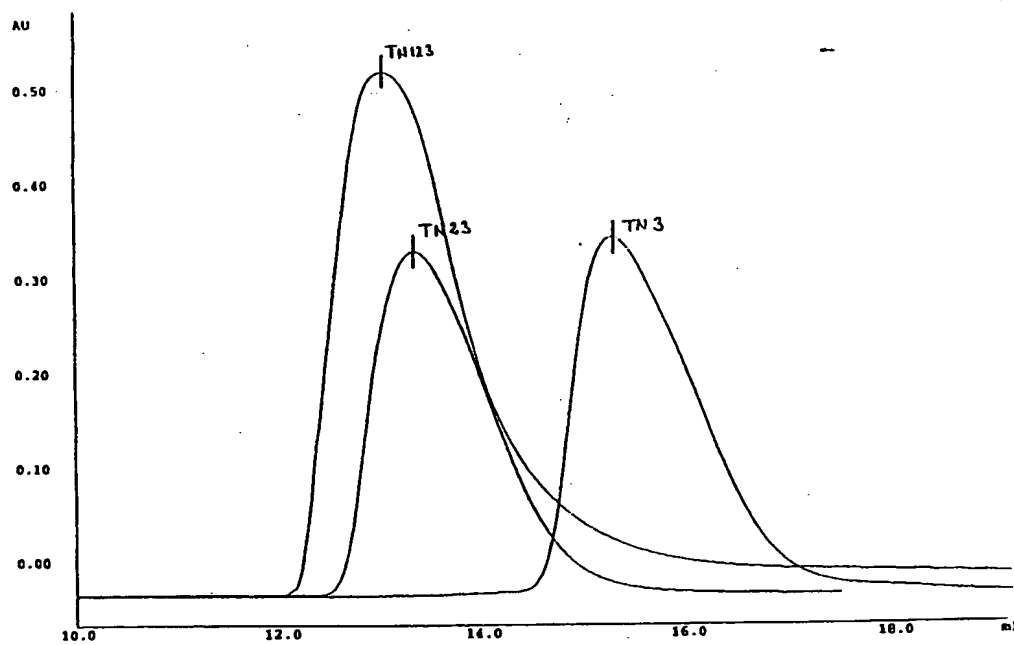


Fig. 9

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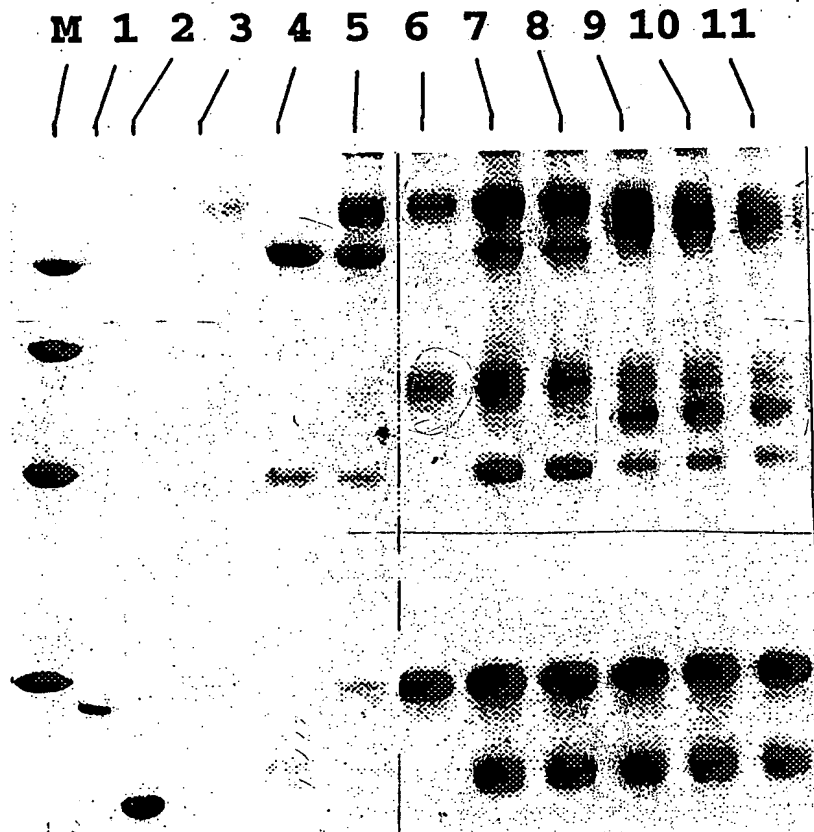


Fig. 10

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Fig. 12

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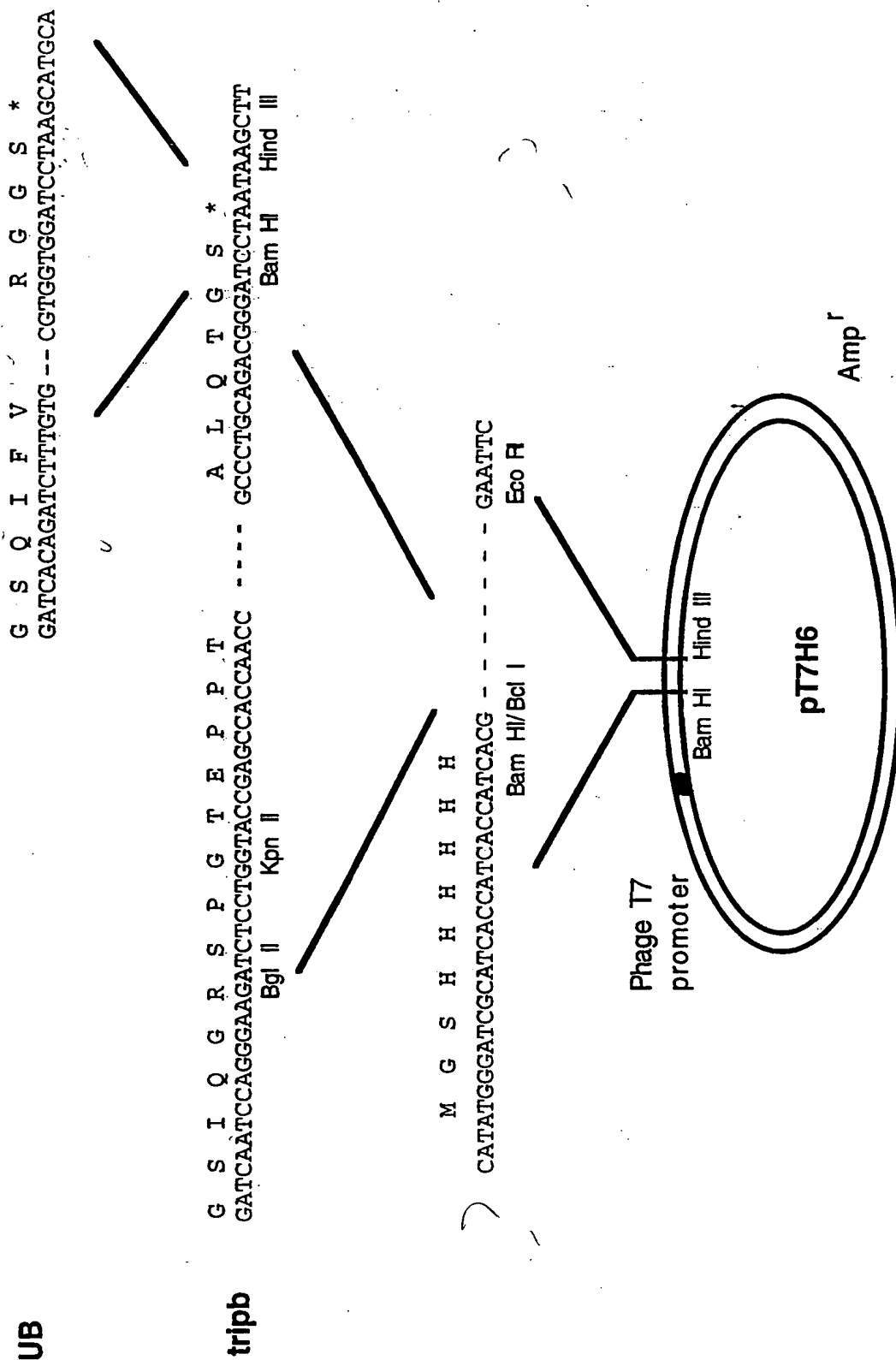


Fig. 13

Fig. 13

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H6FXtripb-UB fusion protein

1 M G S H H H H H H G S I Q G R S P G T E P P T Q K P K K I V 30
31 N A K K D V V N T K M F E E L K S R L D T L A Q E V A L L K 60
61 E Q Q A L Q T G S Q I F V K T L T G K T I T L E V E P S D T 90
91 I E N V K A K I Q D K E G I P P D Q Q R L I F A G K Q L E D 120
121 G R T L S D Y N I Q K E S T L H L V L R L R G G S * 145

Fig. 14

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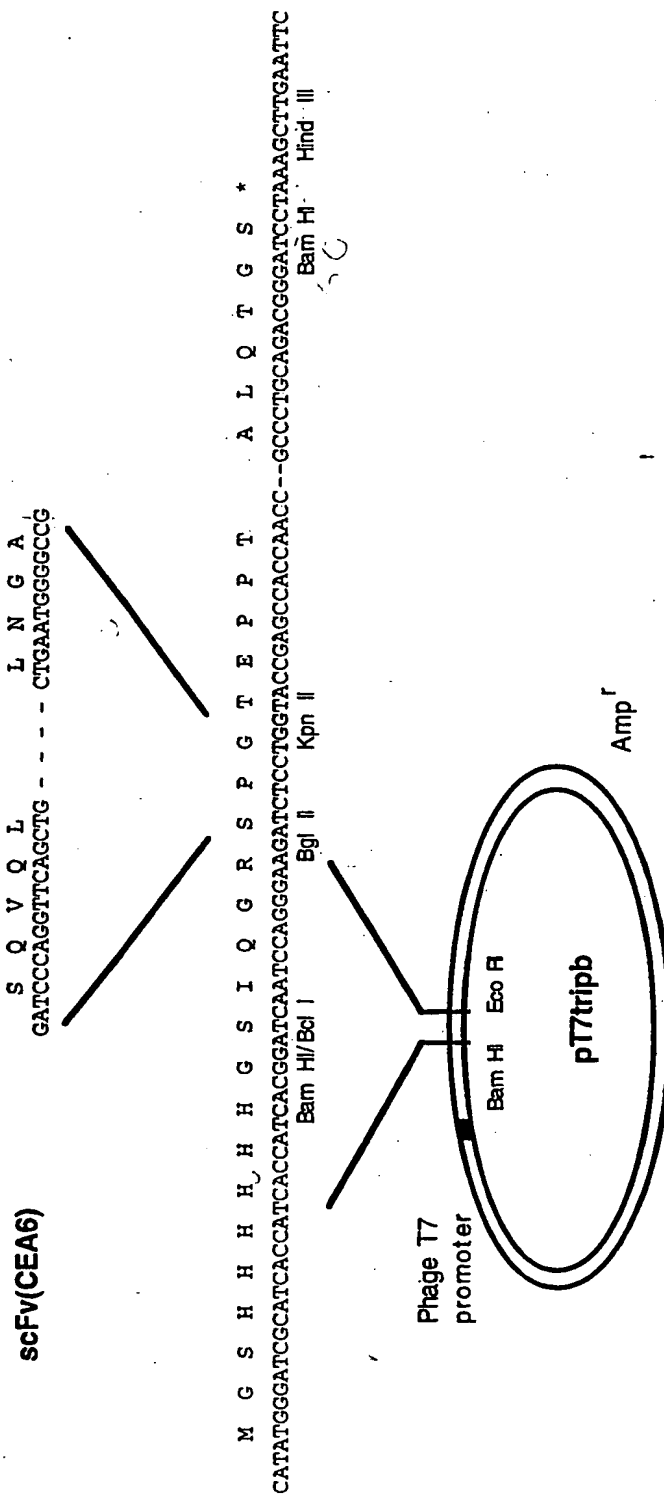


Fig. 15

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H6FXscFv(CEA6)-trypb fusion protein

1 M G S H H H H H H G S I Q G R S Q V Q L Q Q S G A E V K K P 30
31 G S S V K V S C K A S G G T F S N S P I N W L R Q A P G Q G 60
61 L E W M G S I I P S F G T A N Y A Q K F Q G R L T I T A D E 90
91 S T S T A Y M E L S S L R S E D T A V Y Y C A G R S H N Y E 120
121 L Y Y Y Y M D V W G Q G T M V T V S S G G G G S G G G G S G 150
151 G G G S D I Q M T Q S P S T L S A S I G D R V T I T C R A S 180
181 E G I Y H W L A W Y Q Q K P G K A P K L L I Y K A S S L A S 210
211 G A P S R F S G S G S G T D F T L T I S S L Q P D D F A T Y 240
241 Y C Q Q Y S N Y P L T F G G G T K L E I K R A A A E Q K L I 270
271 S E E D L N G A G T E P P T Q K P K K I V N A K K D V V N T 300
301 K M F E E L K S R L D T L A Q E V A L L K E Q Q A L Q T G S 330
331 *

Fig. 16

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scFv(CEA6)

S Q V Q L L, N, G, A
GATCCAGGTTCACTG - - - CTGAATGGGGCCTA

M G S H H H H G S I Q G R S P G T E P P T A L Q T G S *
CATATGGGATCGCATCACCATCACGATCATCCAGGGAAGATCTCTGTACCGAGGCCACCAACC--GCCCTGCAGACGGGATCCTAAAGCTTGAATTC
Bam HI/Bcl I Bgl II Kpn II Bam HI Hind III

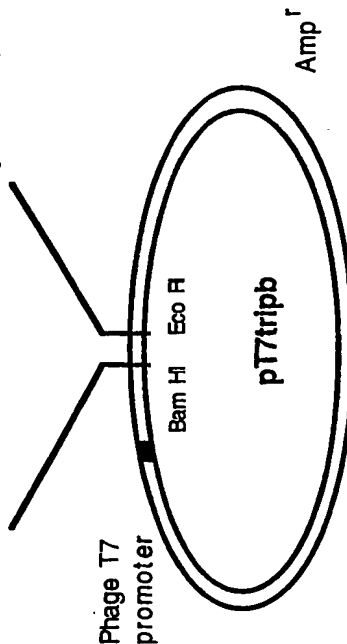


Fig. 17

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H6FXtripb-scFv(CEA6) fusion protein

1 M G S H H H H H G S I Q G R S P G T E P P T Q K P K K I V 30
31 N A K K D V V N T K M F E E L K S R L D T L A Q E V A L L K 60
61 E Q Q A L Q T G S Q V Q L Q Q S G A E V K K P G S S V K V S 90
91 C K A S G G T F S N S P I N W L R Q A P G Q G L E W M G S I 120
121 I P S F G T A N Y A Q K F Q G R L T I T A D E S T S T A Y M 150
151 E L S S L R S E D T A V Y Y C A G R S H N Y E L Y Y Y Y M D 180
181 V W G Q G T M V T V S S G G G G S G G G G S G G G G S D I Q 210
211 M T Q S P S T L S A S I G D R V T I T C R A S E G I Y H W L 240
241 A W Y Q Q K P G K A P K L L I Y K A S S L A S G A P S R F S 270
271 G S G S G T D F T L T I S S L Q P D D F A T Y Y C Q Q Y S N 300
301 Y P L T F G G G T K L E I K R A A A E Q K L I S E E D L N G 330
331 A *

Fig. 18

scFv(CEA6)

S Q V Q L L N G A
GATCCCAAGGTTCACTG - - - CTGAATGGGCCG

scFv(CEA6)

M G S H H H H G S I Q G R S P G T E P P T A L Q T G S *

CAATATGGGATCGCATCACCATCACCATCGGATCAATCCAGGGAGATCTCTGTGTACCGAGCCACCAACC--GCCCTGCAGAGGGATCTTAAGCTTGAATTC

Bam HI/Bcl I Bgl II Kpn II Bam HI Hind III

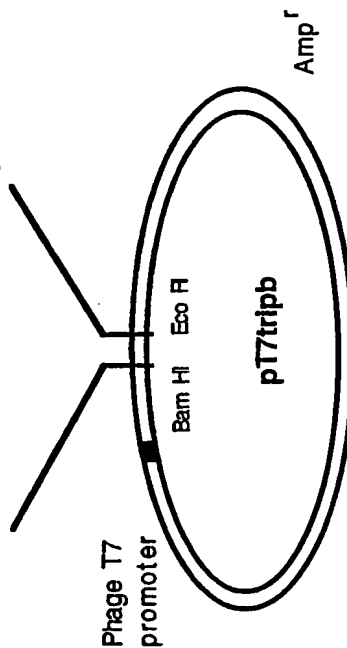


Fig. 19

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H6FXscFv(CEA6)-triph-scFv(CEA6) fusion protein

1 M G S H H H H H H G S I Q G R S Q V Q L Q Q S G A E V K K P 30
31 G S S V K V S C K A S G G T F S N S P I N W L R Q A P G Q G 60
61 L E W M G S I I P S F G T A N Y A Q K F Q G R L T I T A D E 90
91 S T S T A Y M E L S S L R S E D T A V Y Y C A G R S H N Y E 120
121 L Y Y Y Y M D V W G Q G T M V T V S S G G G G S G G G G S G 150
151 G G G S D I Q M T Q S P S T L S A S I G D R V T I T C R A S 180
181 E G I Y H W L A W Y Q Q K P G K A P K L L I Y K A S S L A S 210
211 G A P S R F S G S G S G T D F T L T I S S L Q P D D F A T Y 240
241 Y C Q Q Y S N Y P L T F G G G T K L E I K R A A A E Q K L I 270
271 S E E D L N G A G T E P P T Q K P K K I V N A K K D V V N T 300
301 K M F E E L K S R L D T L A Q E V A L L K E Q Q A L Q T G S 330
331 Q V Q L Q Q S G A E V K K P G S S V K V S C K A S G G T F S 360
361 N S P I N W L R Q A P G Q G L E W M G S I I P S F G T A N Y 390
391 A Q K F Q G R L T I T A D E S T S T A Y M E L S S L R S E D 420
421 T A V Y Y C A G R S H N Y E L Y Y Y Y M D V W G Q G T M V T 450
451 V S S G G G G S G G G G S G G G G S D I Q M T Q S P S T L S 480
481 A S I G D R V T I T C R A S E G I Y H W L A W Y Q Q K P G K 510
511 A P K L L I Y K A S S L A S G A P S R F S G S G S G T D F T 540
541 L T I S S L Q P D D F A T Y Y C Q Q Y S N Y P L T F G G G T 570
571 K L E I K R A A A E Q K L I S E E D L N G A * 592

Fig. 20

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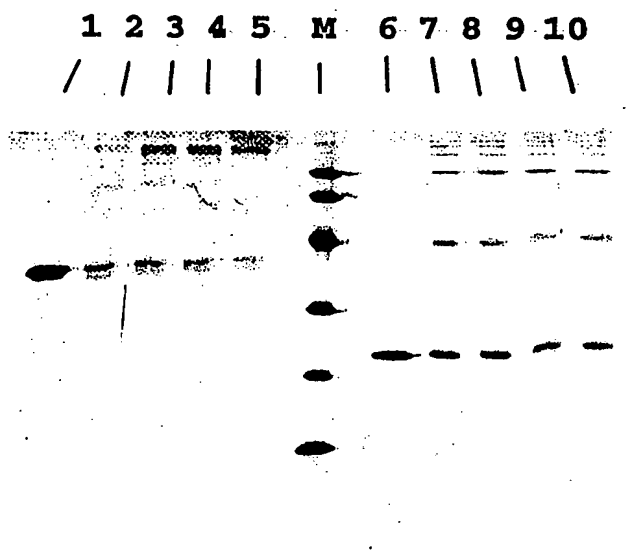


Fig. 21